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CHICAGO, IL 60606-6473

EXAMINER
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CHARLES, DEBRA F

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 01/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/457,999

**Applicant(s)**

HUEBLER ET AL.

**Examiner**

Debra F. Charles

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. Claim 28 has been entered.

***Response to Arguments***

2. Applicant's arguments filed 10 October 2003 have been fully considered but they are not persuasive in light of new grounds for rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 3, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al. (U.S.PAT. 5230391 A), Manduley et al. (U.S.PAT. 3890492 A) and Molitor et al.(DE 3504511 A1)[translation enclosed].

Re claim 1: Murata et al. disclose a method for controlling a dynamic scale (Abstract):

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said dynamic scale(Abstract) having a motor-driven conveyor for moving a postal item, in a dynamic operating mode(Abstract), in succession with continuous movement through an entry region of the scale, a weighing pan(Abstract, Col. 5, Lines 60-67, Col. 7, Lines 50-67), said method comprising the steps of:

in said dynamic operating mode(Abstract), supplying a piece of mail to said entry region of the scale at a predetermined regulated conveying speed(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20) which is independent of the format of the piece of mail,

deactivating regulation of the conveying speed(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20) and obtaining a weight measurement of said postal item, thereby allowing said weight measurement to be obtained with said postal item moving at a speed other than said predetermined regulated conveying speed; and

after said measuring time span, re-activating regulation of the conveying speed(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20) and moving said postal item at said predetermined regulated conveying speed(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20).

Murata et al. disclose(s) the claimed invention except processing mixed postal items having respectively different formats, disclose entry region of the scale, a weighing pan, and a discharge region of the scale. However, in Abstract, Col. 5, Lines 60-67, Col. 6, Lines 1-30, Col. 7, Lines 50-67, thereof, Manduley et al. disclose(s) an entry region of the scale, a weighing pan and a discharge region of the scale for processing mixed postal items having different formats. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Manduley et al. The motivation to combine these references is to get the benefit of an appropriate location to receive, weight and discharge the article to be weighed.

Murata et al. disclose(s) the claimed invention except during a measuring time range while said postal item is conveyed without a stoppage through said weighing pan. However, on page 2 of the translation, claim 1, thereof Molitor et al. disclose weighed item is weighed while moving over the weighing table in a continuous movement. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Molitor et al. The motivation to combine these references is to get the benefit of an appropriate location to receive, weight and discharge the article to

be weighed.

Official notice is taken that on-the-fly weighing incorporating weight measurement obtained with said postal item moving at a speed other than said predetermined regulated conveying speed are an old and well-known types of technology in the postal scale and weighing instrument art. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement Murata et al.'s weighter conveyor system to include speed control features to get the benefit of conveyor speed control to ensure high weighing accuracy given that Murata et al.'s invention does indicate the conveyor stops and starts, and this is a form of conveyor speed control.

Re claim 2: Murata et al. disclose the steps of:

maintaining said conveying speed(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20) at said predetermined, regulating conveying speed(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20) before a beginning of said measuring time span;

sensing when said postal item is located in said entry region of the scale(Abstract, Col. 3, Lines 15-67); and

upon sensing that said postal item has exited said entry region of the scale, supplying unregulated voltage pulses to the motor driving said conveyor during said measuring time span to operate said conveyor with a predetermined power without regulation of said conveying speed, and tensioning said conveyor to reduce said conveying speed of said postal item during said measuring time span dependent on a weight of said postal item(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20, Col. 3, Lines 15-67).

Re claim 3: Murata et al. disclose said dynamic scale is used with a further processing station having a further processing station conveying speed, and regulating said conveying speed(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20, Col. 3, Lines 15-67)

in said dynamic scale dependent on said further processing station conveying speed(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20, Col. 3, Lines 15-67) to produce an output of postal items from said dynamic scale(Abstract) which is approximately 66% of an output of postal items from said further processing station.

Re claim 4: Murata et al. disclose evaluating said weight measurement of said postal item in said dynamic operating mode(Abstract, Col. 2, Lines 60-67, Col. 3, Lines 1-67);

and dependent on the evaluation of said weight measurement, switching into a further operating mode and statically weighing said postal item(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20, Col. 3, Lines 15-67).

Re claim 6: Murata et al. disclose further operating mode, conveying said postal item at a constant conveying speed(Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20, Col. 3, Lines 15-67) through said discharge region of said scale.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al., Manduley et al. and Molitor et al. as applied to claim 4 above, and further in view of Freeman et al. (U.S.PAT. 4956782 A).

Re claim 5: Murata et al., Manduley et al. and Molitor et al. disclose(s) the claimed invention except reversing a conveying direction of said conveyor for statically weighing said postal item; and subsequently again reversing the conveying speed of said conveyor after statically weighing said postal item to convey said postal item through said discharge region of said scale. However, in Abstract, Col. 6, Lines 40-65 thereof, Freeman et al. disclose(s) a conveyor belt that goes in forward and reverse



directions. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Freeman et al. The motivation to combine these references is to get the benefit of moving the weighing conveyer backwards.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al., Manduley et al. and Molitor et al. as applied to claim 1 above, and further in view of Feinland et al. (U.S.PAT. 5226496 A).

Re claim 7: Murata et al., Manduley et al. and Molitor et al. disclose(s) the claimed invention except evaluating said weight measurement of said postal item and identifying if said weight measurement is likely to be imprecise; and if said weight measurement is likely to be imprecise, switching into a further operating mode and conveying said postal item directly through said discharge region of said scale and assigning a weight value to said postal item in place of said weight measurement, said weight value being higher than said weight measurement which is likely to be imprecise. However, in Col. 6, Lines 1-30 thereof, Feinland et al. disclose(s) analyzing weight measurement of postal item and determining if the resulting measurement may be inaccurate and then conveying postal item directly through the discharge region if weight value is higher than the inaccurate weight item. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of

Feinland et al. The motivation to combine these references is to get the benefit of dealing effectively with imprecise weight measurements.

Official notice is taken that assigning a weight value to said postal item in place of said weight measurement is an old and well-known type of method of determining postage in the postal scale and weighing instrument art. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to assign a weight measurement to an article whose weight is unknown.

7. Claims 8, 9, 10, 21, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al., Manduley et al., Molitor et al. and Feinland et al.

Re claims 8, 9, 21 and 22: Murata et al., Manduley et al. and Molitor et al. disclose a conveyor arrangement for conveying postal items having a conveyor belt driven by a motor(Abstract);

said conveyor arrangement, in a dynamic operating mode(Abstract), conveying a postal item with continuous movement without a stoppage in succession through said entry region(Abstract), and

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a controller which operates said motor to move said belt at a predetermined, regulated conveying speed(Abtract, Col. 1, Lines 45-67, Col. 2, Lines 1-20,Col. 3, Lines 15-67, Fig. 4),

said controller deactivating regulation of said conveying speed(Abtract, Col. 1, Lines 45-67, Col. 2, Lines 1-20, Col. 3, Lines 20-35, Fig. 4) during a measuring time span during which a weight measurement of said postal item is made, allowing said weight measurement to be made with said postal item moving at a speed other than said predetermined, regulated conveying speed, and, after said measuring time span, said controller re-activating regulation of said conveying speed(Abtract, Col. 1, Lines 45-67, Col. 2, Lines 1-20, Col. 3, Lines 20-35, Fig. 4).

Murata et al. disclose(s) the claimed invention except entry region of the scale, a weighing pan, and a discharge region of the scale, and at an angle relative to said back wall. However, in Abstract, Fig 1a, Col. 5, Lines 60-67, Col. 6, Lines 1-30, Col. 7, Lines 50-67, thereof, Manduley et al. disclose(s) to use a scale housing, entry region of the scale, a weighing pan, and a discharge region of the scale. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Manduley et al. The motivation to combine these references is to get the benefit of an appropriate location to receive, weight and discharge the article to be weighed.

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Murata et al. disclose(s) the claimed invention except weighing cell. However, in Abstract thereof, Feinland et al. disclose(s) weighing cell. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Feinland et al. The motivation to combine these references is to get the benefit of using a load cell transducer to convey the weight signal.

Official notice is taken that on-the-fly weighing incorporating weight measurement to be made with said postal item moving at a speed other than said predetermined, regulated conveying speed, and, after said measuring time span, said controller(Murata et al., Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20, Col. 3, Lines 20-35, Fig. 4) re-activating regulation of said conveying speed are an old and well-known type of technology in the postal scale and weighing instrument art, and center of gravity. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement Murata et al.'s weighter-conveyor system to include speed control features to get the benefit of conveyor speed control to ensure high weighing accuracy given that Murata et al.'s invention does indicate the conveyor stops and starts, and this is a form of conveyor speed control.

Re claim 10: Murata et al., Manduley et al. and Molitor et al. disclose a dynamic scale(Abstract) disposed below said conveyor belt(Murata et al., Abstract), a support mechanism for supporting said conveyor belt(Murata et al., Abstract) in said discharge

region comprises an adapter for transferring a postal item from said discharge region to a downstream apparatus(Murata et al., Abstract, Col. 2, Lines 40-67).

Murata et al. disclose(s) the claimed invention except housing, guide wall, and discharge region. However, in Abstract, Fig 1a, Col. 5, Lines 60-67, Col. 7, Lines 20-67, thereof, Manduley et al. disclose(s) a guide wall, housing and discharge region. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Manduley et al. The motivation to combine these references is to get the benefit of an appropriate location to receive, weigh and discharge the article to be weighed.

Re claim 26: Murata et al., Manduley et al. and Molitor et al. disclose a speed sensor mechanically connected to said motor and supplying a signal to said controller identifying a speed of said motor for use by said controller in regulating said conveying speed(Murata et al., Abstract, Col. 1, Lines 45-67, Col. 2, Lines 1-20, Col. 3, Lines 15-67, Fig. 4).

8. Claims 11, 13,14,15, 16,17,18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al., Manduley et al., Molitor et al. and Feinland et al. as applied to claim 8 above, and further in view of Kalm et al. (U.S.PAT. 5901830 A).

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Re claims 11, 13, 14 and 15: Murata et al., Manduley et al., Molitor et al. and Feinland et al. disclose(s) the claimed invention except first conveying direction and said second conveying direction, switches said transmission, and said tensioning arrangement comprises at least one adjustable tension spring for setting said tension. However, in Abstract, Col. 4, Lines 1-60 thereof, Kalm et al. disclose(s) conveying first and second direction, and tensioning arrangement. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Kalm et al. The motivation to combine these references is to get the benefit of controlling conveyor belts' direction and speed, controlling the tension of the conveyor belt.

Re claim 16: Murata et al. disclose(s) the claimed invention except a tensioning arrangement comprises a tensioning roller around which said conveyor belt is entrained, said tensioning roller being mounted on a tensioning shaft, said tensioning shaft having opposite ends each receiving a guide pin, respective helical springs wound around each guide pin, two stop plates respectively attached to said carrier plates, each guide pin having a nut screwed thereon and said stop plate being disposed between said nut and said tensioning shaft with each helical spring being compressed between one of said nuts and one of said stop plates, each helical spring being compressively pre-stressed. However, in Abstract, Cols.1-4 thereof, Kalm et al. disclose(s) this mechanical machinery that permits adjusting the compression and tension of conveyer belt rollers. It

would be obvious to one of ordinary skill in the art to modify the invention of \*\*\*\* based on the teachings of Kalm et al. The motivation to combine these references is to get the benefit of controlling the tension of the conveyor belt.

Re claim 17: Murata et al., Manduley et al., Molitor et al. and Feinland et al. disclose(s) the claimed invention except guide pins are respectively received in said tensioning shaft so as not to rotate within said tensioning shaft, and further comprising, for each guide pin, a securing ring which prevents the guide pin from sliding out of said tensioning shaft. However, in Abstract, Cols.1-4 thereof, Kalm et al. disclose(s) this mechanical machinery that permits adjusting the compression and tension of conveyor belt rollers, as well as guide pins. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Kalm et al. The motivation to combine these references is to get the benefit of controlling the tension of the conveyor belt.

Re claim 18: Murata et al., Manduley et al., Molitor et al. and Feinland et al. disclose(s) the claimed invention except each of said carrier plates has an oblong hole therein, the respective oblong holes receiving said tensioning shaft and allowing said tensioning shaft to glide therein when said conveyor belt(Murata et al., Abstract) is tensioned by said tensioning roller. However, in Abstract, Cols.1-4 thereof, Kalm et al. disclose(s) this mechanical machinery that permits adjusting the compression and

tension of conveyer belt rollers, as well as guide pins. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Kalm et al. The motivation to combine these references is to get the benefit of controlling the tension of the conveyor belt.

Re claim 19, Murata et al., Manduley et al., Molitor et al. and Feinland et al. disclose(s) the claimed invention except comprising a drive roller entrained by said conveyor belt and driven by said motor, said drive roller comprising a sandblasted aluminum pinion, and said conveyor belt being comprised of a low-stretch fabric having a glide coating facing said drive roller and allowing a predetermining slippage between said drive roller and said conveyor belt dependent on a belt tension of said conveyor belt. However, in Abstract, Cols.1-4 thereof, Kalm et al. disclose(s) this mechanical machinery that permits adjusting the compression and tension of conveyer belt rollers, as well as guide pins. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Kalm et al. The motivation to combine these references is to get the benefit of controlling the tension of the conveyor belt.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al., Manduley et al., Molitor et al., Feinland et al. and Kalm et al. as applied to claim 11 above, and further in view of Cordery et al. (U.S.PAT. 4903788 A).



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Murata et al., Manduley et al., Molitor et al., Feinland et al. and Kalm et al. disclose(s) the claimed invention except wherein said motor comprises a DC motor operated with a voltage having a polarity, and wherein said driver switches said polarity of said voltage to switch. However, in Abstract, Col. 3, Lines 1-20, Col. 6, Lines 12-60, Col. 9, Lines 1-40 thereof, Cordery et al. disclose a motor that is a d.c. motor operating with a voltage that has a polarity, and driver switches said polarity of the voltage to switch. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Cordery et al. The motivation to combine these references is to get the benefit of controlling conveyor belts' direction and speed.

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al., Manduley et al., Molitor et al. and Feinland et al. as applied to claim 19 above, and further in view of Braun et al. (U.S.PAT. 3955666).

Murata et al., Manduley et al., Molitor et al., Feinland et al. and Kalm et al. disclose(s) the claimed invention except wherein said glide coating is comprised of plastic. However, in Abstract, Col. 1, Lines 55-67, Col. 2, Lines 5-20, thereof Braun et al. disclose glide coating is comprised of plastic. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Braun et al. The motivation to combine these references is to get the benefit of a smooth surface.

11. Claims 23, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al., Manduley et al., Molitor et al. and Feinland et al. as applied to claim 8 above, and further in view of Cordery et al. (U.S.PAT. 4903788 A).

Re claims 23 and 24: Murata et al., Manduley et al., Molitor et al. and Feinland et al. disclose(s) the claimed invention except said weighing pan is comprised of flexurally and torsionally stiff lightweight material and has a back wall. However, in Abstract, Col.3, Lines 1-20, thereof Cordery et al. disclose a tray comprised of stiff lightweight material. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Cordery et al. The motivation to combine these references is to get the benefit of a specific location to hold the object to be weighed.

Re claim 25: Murata et al., Manduley et al., Molitor et al. and Feinland et al. disclose(s) the claimed invention except wherein said back wall of said weighing pan is comprised of a one-piece sandwich structure. However, in Abstract, Col. 5, Lines 60-67, Col. 7, Lines 20-67, Fig 1a, thereof Manduley et al. a back wall of a weighing pan that is a one piece structure. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Manduley et al. The motivation to combine these references is to get the benefit of a specific location to hold the object to get the benefit of a walled in weighing structure.

12. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al., Manduley et al., Molitor et al., Feinland et al. as applied to claim 26 above, and further in view of Sakai et al. (U.S.PAT. 5754361).

Re claim 27: Murata et al., Manduley et al., Molitor et al. and Feinland et al. disclose(s) the claimed invention except wherein said speed sensor comprises an encoder.

However, in Abstract, Col. 8, Lines 60-67, Col. 9, Lines 1-15, Sakai et al. discloses a speed sensor with an encoder. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Sakai et al. The motivation to combine these references is to get the benefit of controlling the speed of the conveyor belt.

13. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al., Manduley et al., Molitor et al. and Feinland et al. as applied to claim 8 above, and further in view of Cordery et al. (U.S.PAT. 4903788 A).

Murata et al., Manduley et al., Molitor et al. and Feinland et al. disclose(s) the claimed invention except motor is a d.c. motor, and wherein said controller contains a regulation loop, including said d.c. motor, for regulating said conveying speed. However, in Abstract, Col. 3, Lines 1-20, Col. 6, Lines 12-60, Col. 9, Lines 1-40 thereof, Cordery et al. disclose a motor that is a d.c. motor operating with a voltage that has a polarity, and driver switches said polarity of the voltage to switch. It would be obvious to one of ordinary skill in the art to modify the invention of Murata et al. based on the teachings of Cordery et al. The motivation to combine these references is to get the benefit of

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controlling conveyor belts' direction and speed. Further, a regulation loop is an old and well-known technology in the art. It would be obvious to include a regulation loop to effectively control the conveyer's operating speed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra F. Charles whose telephone number is (703) 305-4718. The examiner can normally be reached on 9-5 Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (703) 308-0505. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5771.

Debra F. Charles

Examiner

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HYUNG SOUGH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER

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